

FIG. 1

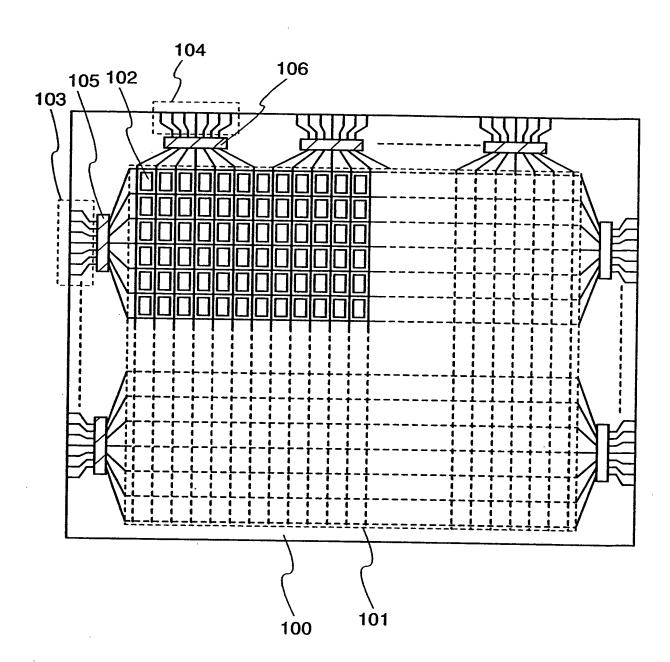


FIG. 2

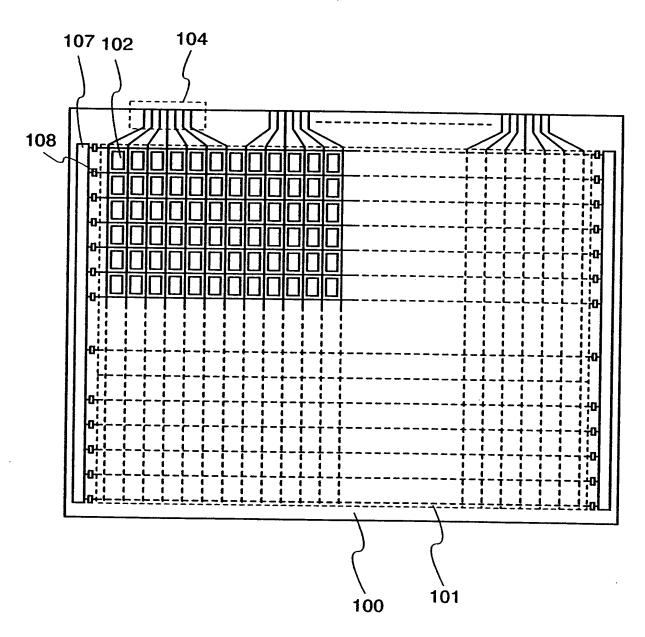
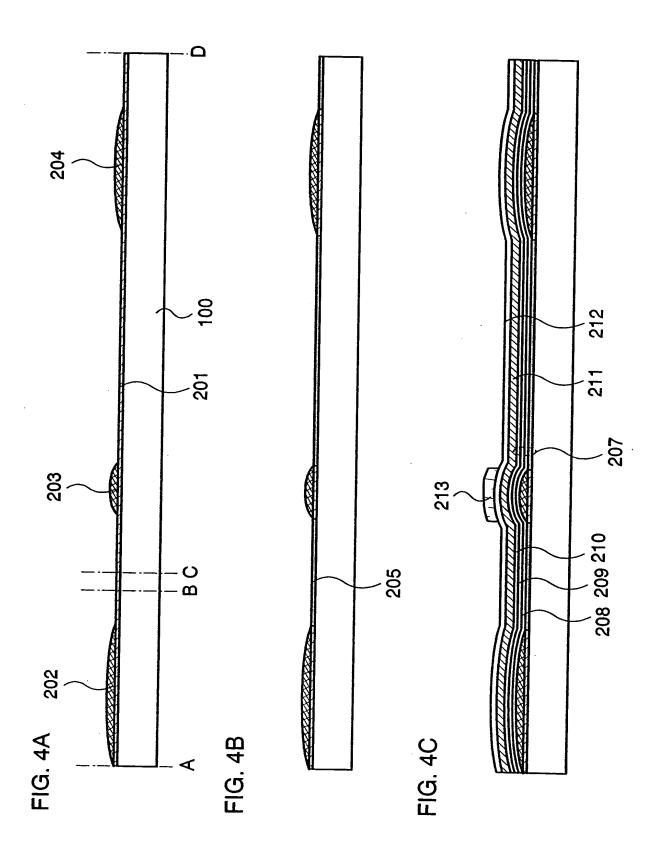
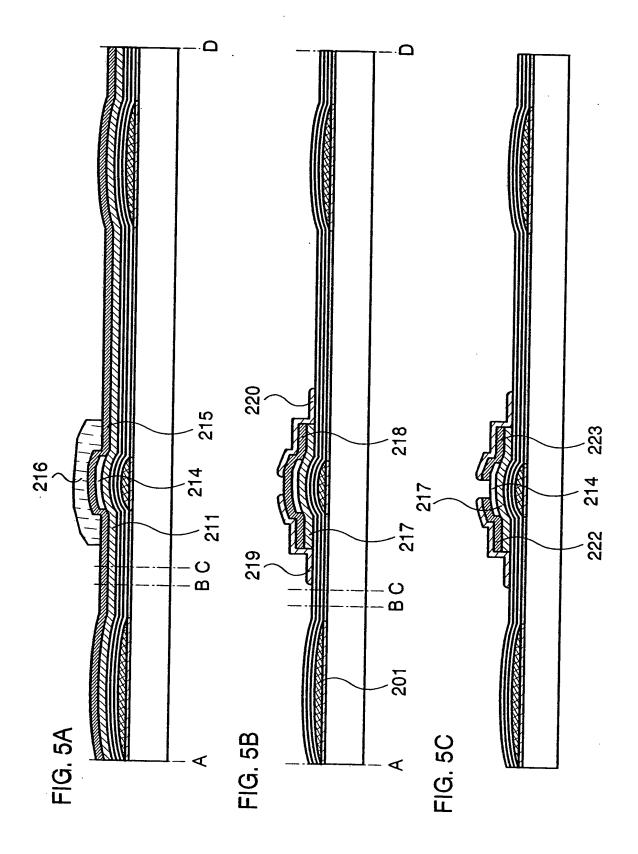


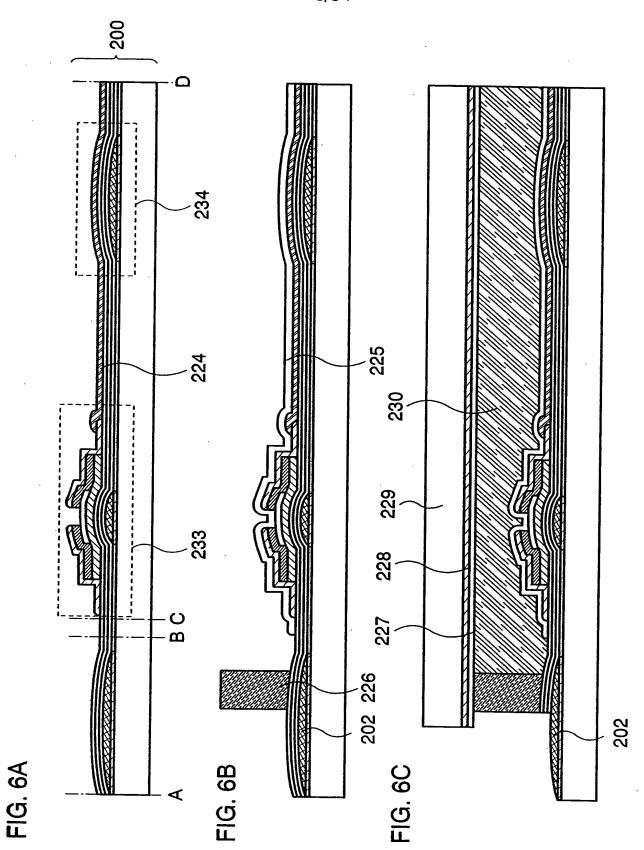
FIG. 3



i



 $\bigcap$ 



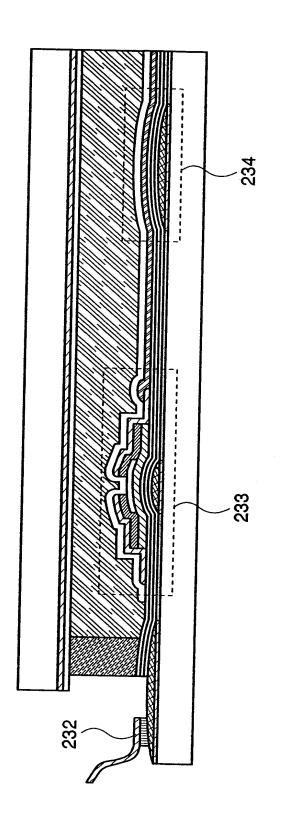
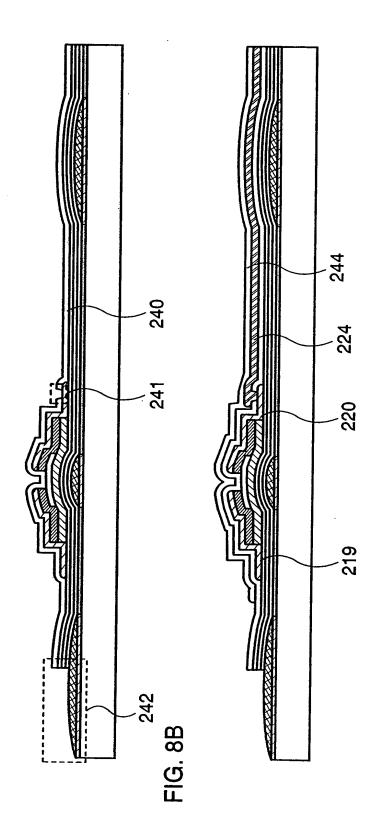
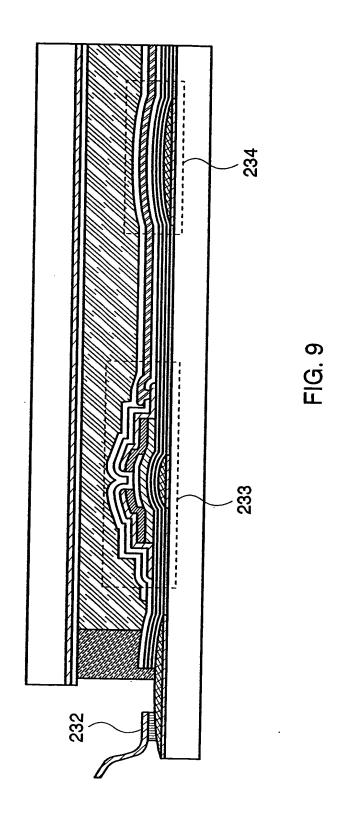
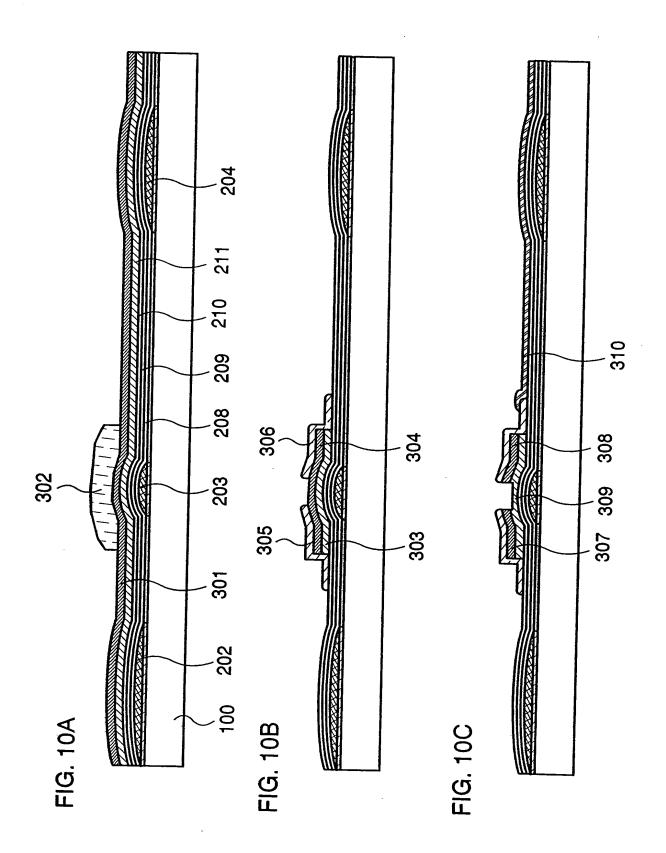


FIG. 7







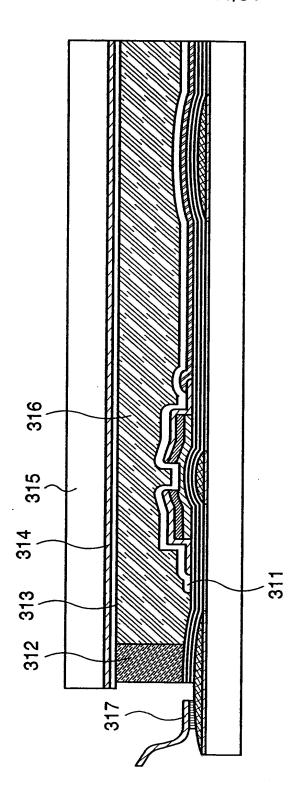


FIG. 11

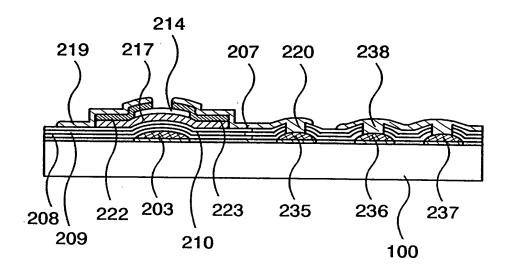


FIG. 12

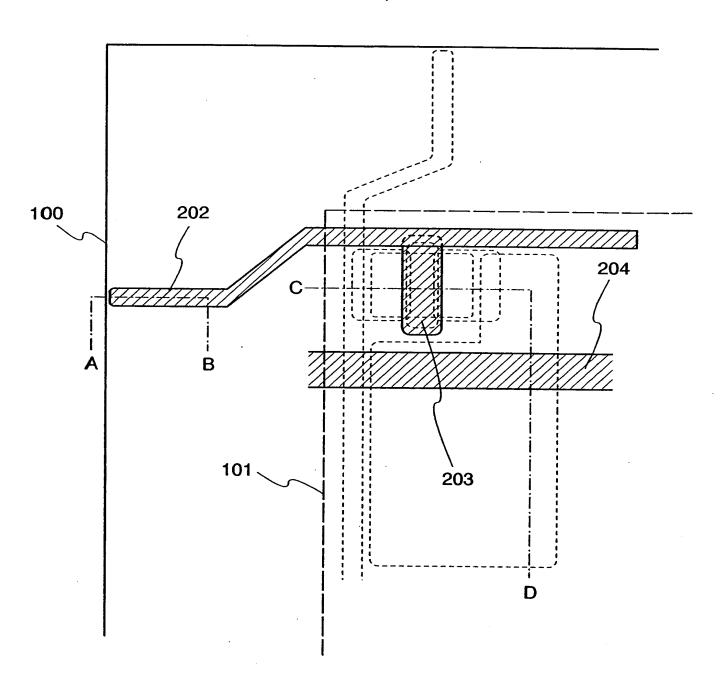


FIG. 13

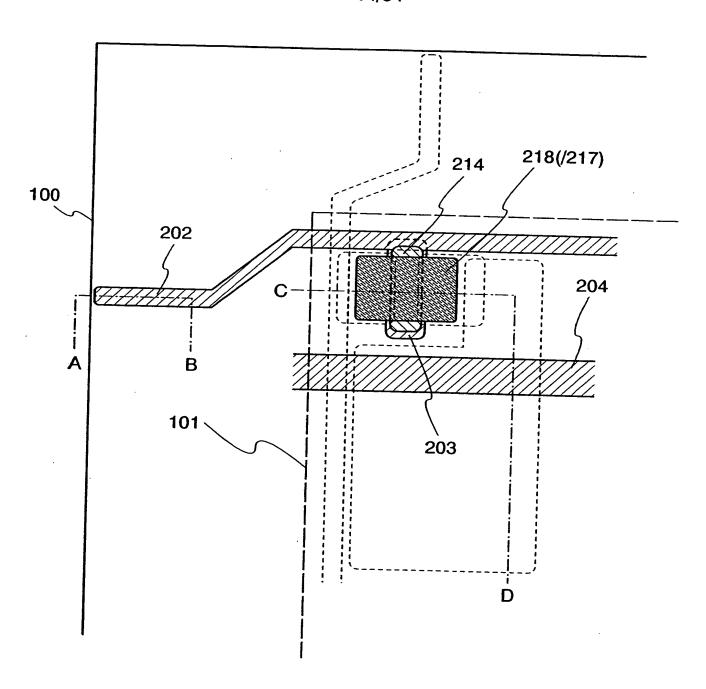


FIG. 14

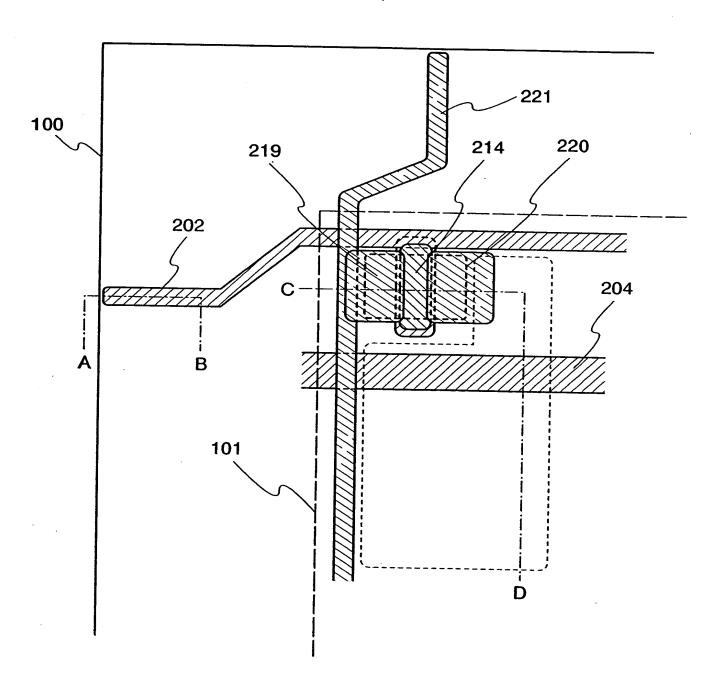


FIG. 15

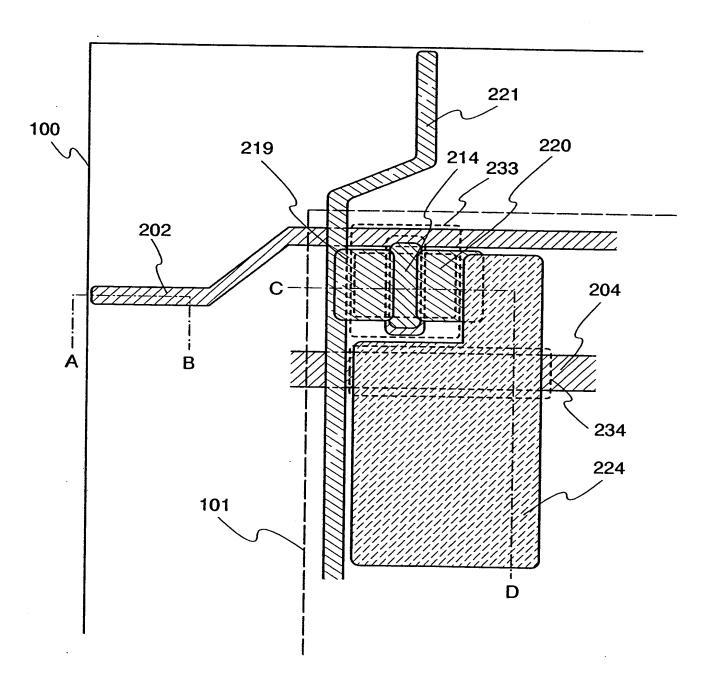
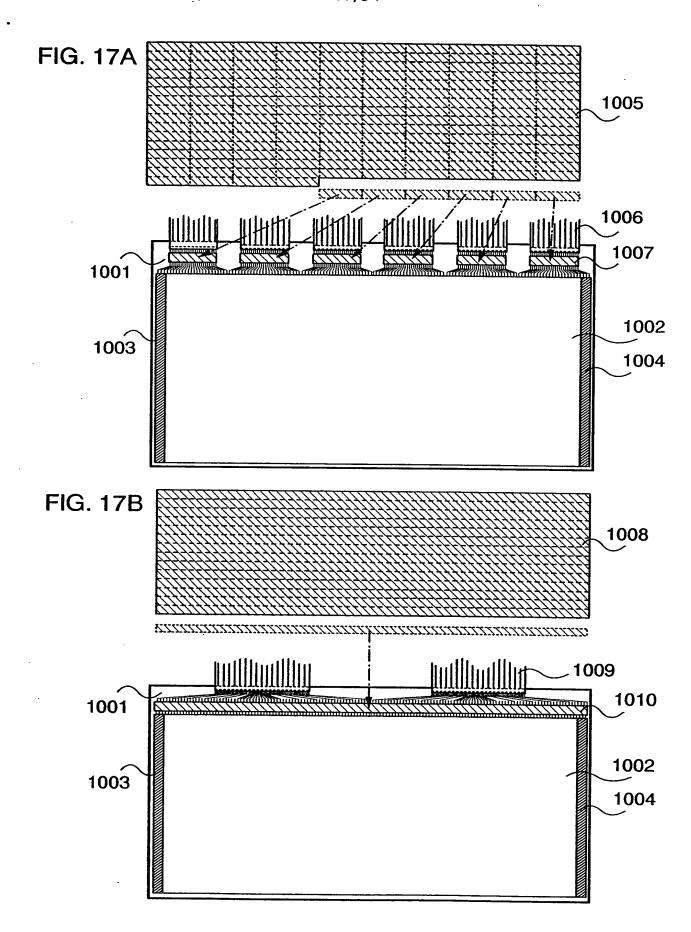
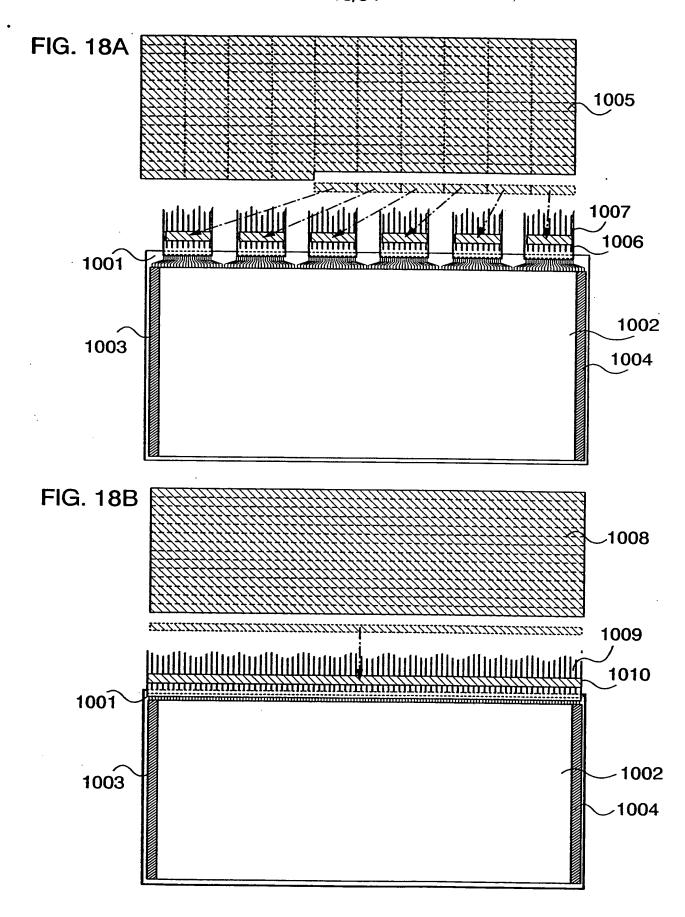


FIG. 16





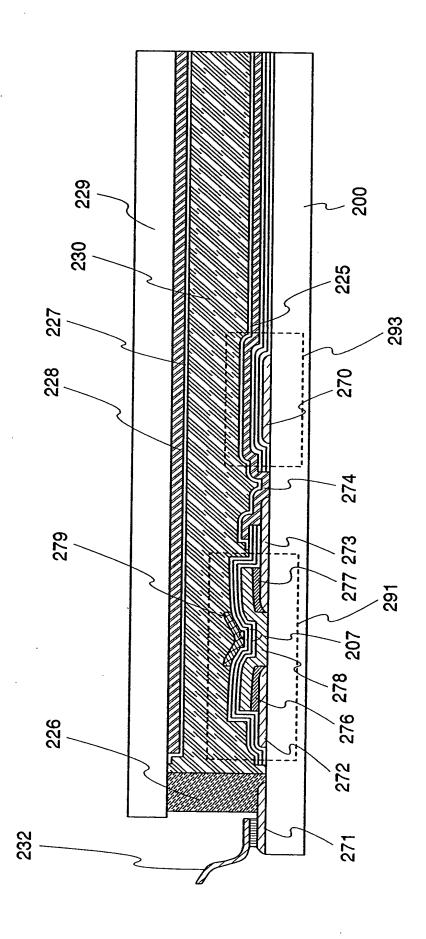


FIG. 19

 $\bigcirc$ 

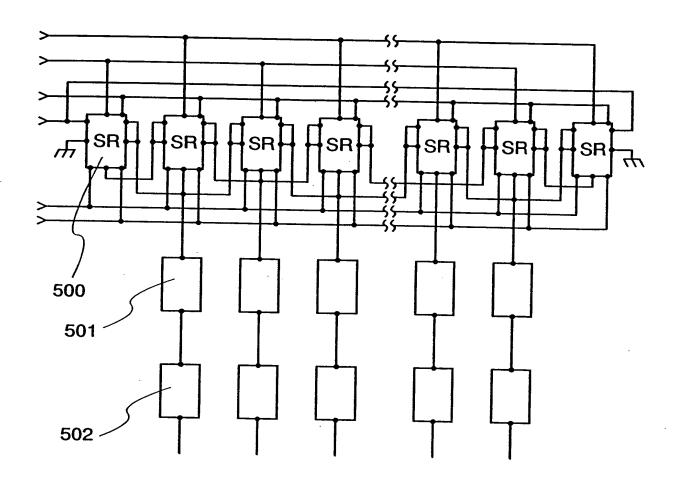


FIG. 20

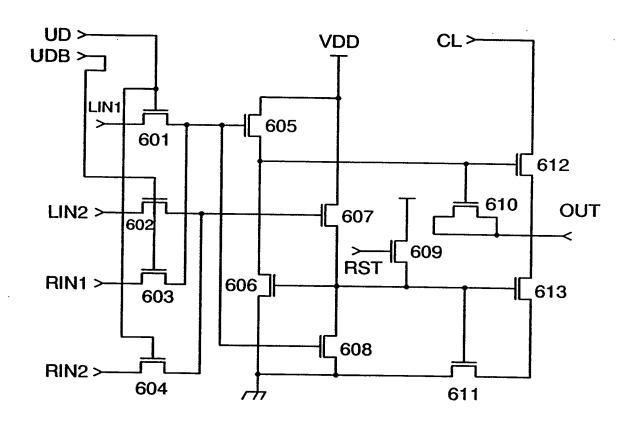


FIG. 21

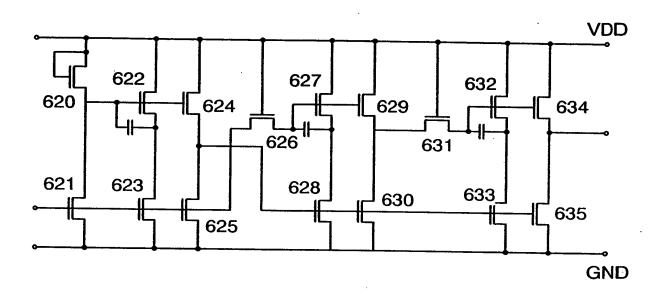


FIG. 22

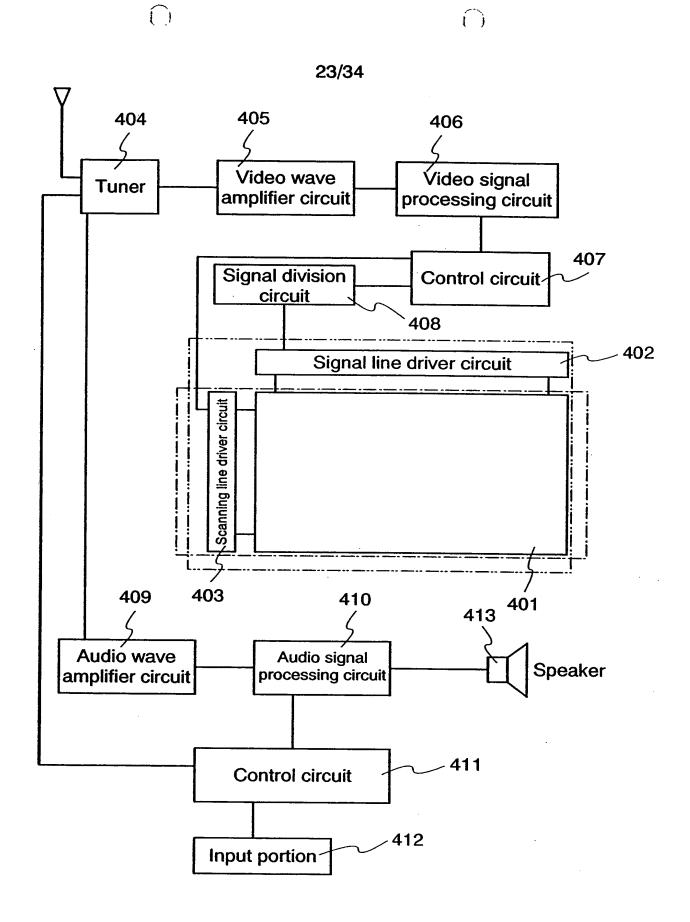


FIG. 23

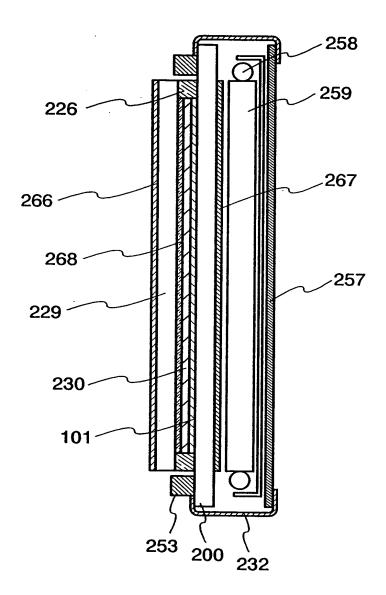


FIG. 24

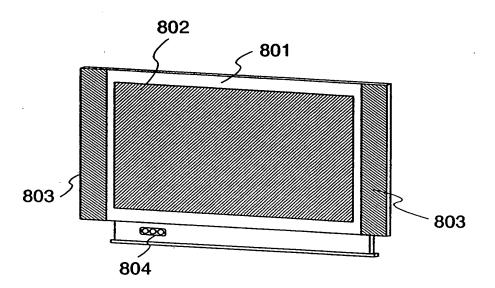


FIG. 25

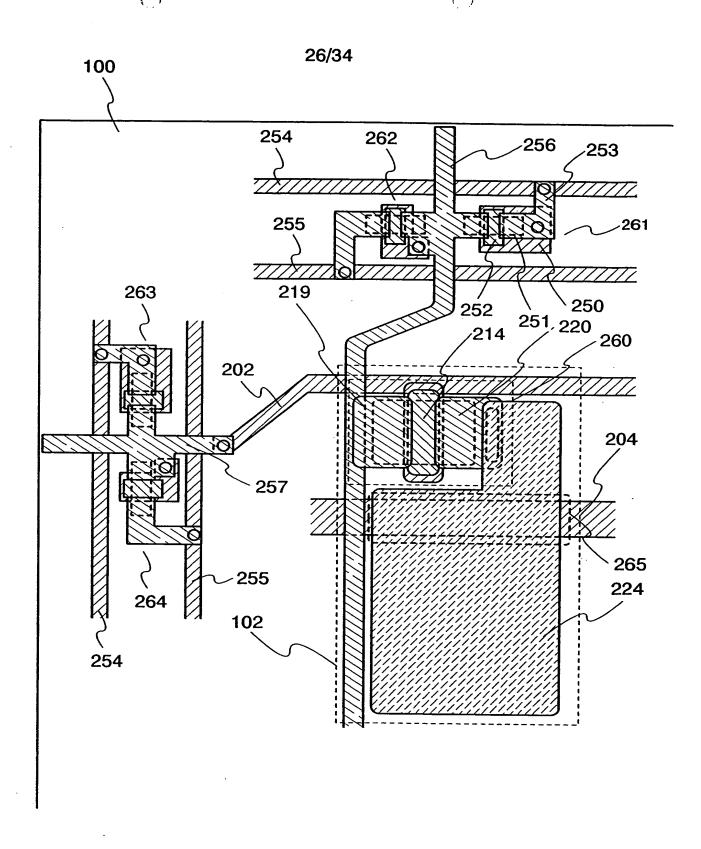


FIG. 26

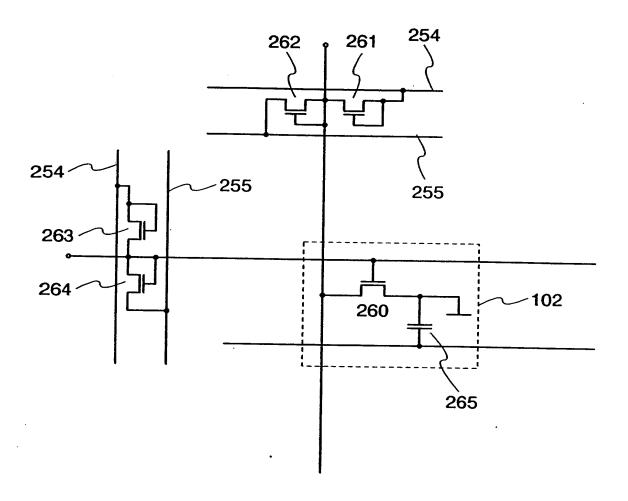


FIG. 27

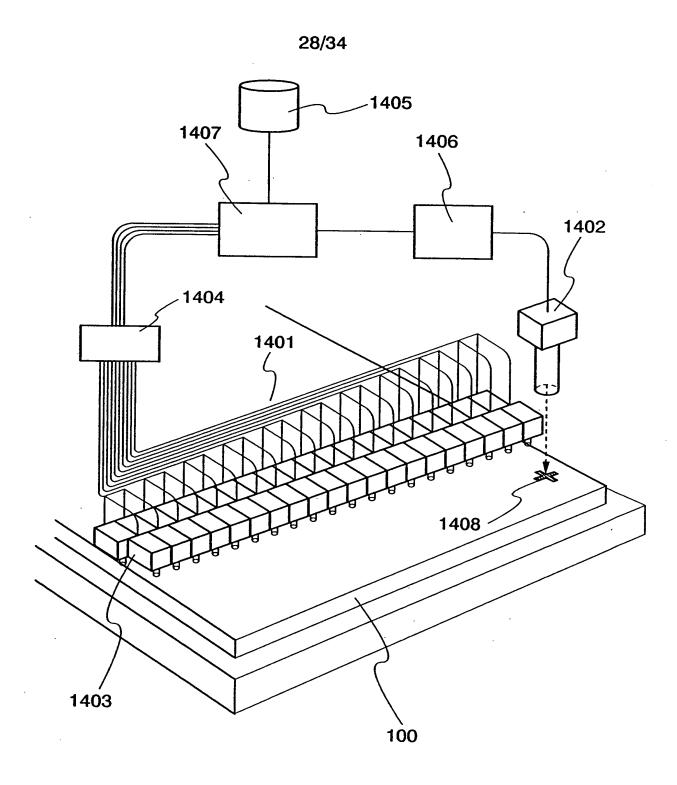


FIG. 28

## 29/34

## **EXPLANATION OF REFERENCE**

1	nn	Su	bstrate
- 1	vv	ou	บรแลเย

- 5 101 Pixel portion
  - 102 Pixel
  - 103 Scanning line input terminal
  - 104 Signal line input terminal
  - 105 Scanning line driver IC
- 10 106 Signal line driver IC
  - 107 Scanning line driver circuit
  - 108 Protective circuit
  - 200 TFT substrate
  - 201 Conductive layer
- 15 **202 Wiring** 
  - 203 Gate electrode
  - 204 Capacitor wiring
  - 205 Insulating layer
  - 207 Gate insulating layer
- 20 208 First insulating layer
  - 209 Second insulating layer
  - 210 Third insulating layer
  - 211 Semiconductor layer
  - 212 Insulating layer
- 25 213 Mask
  - 214 Insulating layer
  - 215 N-type semiconductor layer
  - 216 Mask
  - 217 Semiconductor layer
- 30 218 N-type semiconductor layer

## 30/34

- 219 Wiring
- 220 Wiring
- 221 Wiring
- 222 N-type semiconductor layer
- 5 223 N-type semiconductor layer
  - 224 First electrode
  - 225 Insulating layer
  - 226 Sealant
  - 227 Insulating layer
- 10 228 Second electrode
  - 229 Opposite substrate
  - 230 Liquid crystal layer
  - 232 Wiring board
  - 233 Switching TFT
- 15 234 Capacitor element
  - 235 Connection wiring
  - 236 Connection wiring
  - 237 Connection wiring
  - 238 Connection wiring
- 20 240 Insulating layer
  - 241 Opening
  - 242 Opening
  - 244 Alignment film
  - 250 Gate electrode
- 25 251 Semiconductor layer
  - 252 Insulating layer for channel protection
  - 253 Wiring
  - 254 Common potential line
  - 255 Common potential line
- 30 **256 Wiring**

257 Circuit board

258 Cold cathode tube

259 Light conducting plate

260 TFT

5 261 Protective diode

262 Protective diode

263 Protective diode

264 Protective diode

265 Capacitor element

10 266 Polarizing plate

267 Polarizing plate

268 Colored layer

270 Capacitor wiring

271 Wiring

15 **272 Wiring** 

273 Wiring

274 First electrode

276 N-type semiconductor layer

277 N-type semiconductor layer

20 278 Semiconductor layer

279 Gate electrode

291 Switching TFT

293 Capacitor portion

301 N-type semiconductor layer

25 302 Mask

303 Semiconductor layer

304 N-type semiconductor layer

305 Wiring

306 Wiring

30 307 N-type semiconductor layer

## 32/34

- 308 N-type semiconductor layer
- 309 Semiconductor layer
- 310 First electrode
- 311 Insulating layer
- 5 312 Sealant
  - 313 Alignment film
  - 314 Opposite electrode
  - 315 Substrate
  - 316 Liquid crystal layer
- 10 317 Connection terminal
  - 401 Pixel portion
  - 402 Signal line driver circuit
  - 403 Scanning line driver circuit
  - 404 Tuner
- 15 405 Video wave amplifier circuit
  - 406 Video signal processing circuit
  - 407 Control circuit
  - 408 Signal division circuit
  - 409 Audio wave amplifier circuit
- 20 410 Audio signal processing circuit
  - 411 Control circuit
  - 412 Input portion
  - 413 Speaker
  - 500 Pulse output circuit
- 25 501 Buffer circuit
  - 502 Pixel
  - 601 N-channel type TFT
  - 602 N-channel type TFT
  - 603 N-channel type TFT
- 30 604 N-channel type TFT

- 605 N-channel type TFT
- 606 N-channel type TFT
- 607 N-channel type TFT
- 608 N-channel type TFT
- 5 609 N-channel type TFT
  - 610 N-channel type TFT
  - 611 N-channel type TFT
  - 612 N-channel type TFT
  - 613 N-channel type TFT
- 10 620 N-channel type TFT
  - 621 N-channel type TFT
  - 622 N-channel type TFT
  - 623 N-channel type TFT
  - 624 N-channel type TFT
- 15 625 N-channel type TFT
  - 626 N-channel type TFT
  - 627 N-channel type TFT
  - 628 N-channel type TFT
  - 629 N-channel type TFT
- 20 630 N-channel type TFT
  - 631 N-channel type TFT
  - 632 N-channel type TFT
  - 633 N-channel type TFT
  - 634 N-channel type TFT
- 25 635 N-channel type TFT
  - 801 Casing
  - 802 Display screen
  - 803 Speaker
  - 804 Operation switch
- 30 1001 Substrate

1002 Pixel portion

1003 Scanning line driver circuit

1004 Scanning line driver circuit

1005 Mother substrate

5 1006 Flexible wiring

1007 Driver IC

1008 Large-sized substrate

1009 Flexible wiring

1010 Driver IC

10 1401 Droplet discharge means

1402 Imaging means

1403 Head

1404 Control means

1405 Recording medium

15 1406 Image processing means

1407 Computer

1408 Marker